

## ABSTRACT OF THE DISCLOSURE

A gas analyzer system for analyzing samples of compressed or ambient gas such as breathing air within a scuba tank, SCBA or ambient air within an industrial plant and informing the user as 5 to the results of the sample's gas purity without the gas sample having to be physically transported to an accredited laboratory.

The system comprises a gas analyzer situated at a user facility for receiving the contents of a gas sample and detecting gas purity characteristics, and a server situated at a remote certified testing site and electrically coupled to the gas analysis module via data transmission, such as a wireless or a computer network connection, wherein the server, maintained by a qualified third party receives and stores the gas purity characteristics in the form of computer-readable data signals. 10 Computer instructions stored within the qualification server compares the computer-readable data signals representing gas purity characteristics with the contents of a database containing threshold gas purity parameters. After determining if the gas sample characteristics for that particular gas sample meet the 15 required threshold limits, the user receives immediate notification, either by e-mail or by receipt of a fax at the user site, informing the user whether the given gas sample has achieved the required gas purity levels by a qualified third party.